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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,655	01/08/2002	Hidetaka Ito	8009-1001	9177

44987 7590 11/07/2005

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EXAMINER

NGUYEN, DUSTIN

ART UNIT PAPER NUMBER

2154

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/038,655	Applicant(s) ITO, HIDETAKA	
	Examiner Dustin Nguyen	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 1 – 18 are presented for examination.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

B. The claim language in the following claims is not clearly understood:

- I. As per claim 3, it is not clearly explain because the switching of currently used PVC connection to the currently used PVC connection when PVC connection has been released will not result in any switching of PVC connections.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2154

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 2, 4, 5, 7, 9-13, 15, 16 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Yamada et al. [ US Patent Application No 2003/0137933 ].

6. As per claim 1, Yamada discloses the invention substantially as claimed including a PVC switching control method for controlling a PVC connection in a communication network [ i.e. monitor connection and switch over to reserve connection in case of failure ] [ Abstract; and paragraph 0009 ], comprising:

setting a plurality of PVC connections [ i.e. set up plurality of primary connections ] [ Figures 2 and 3; and paragraphs 0009, 0046 and 0048 ] and individually corresponding controlling connections between two exchanges of the communication network [ i.e. set up the corresponding reserve relay connection ] [ paragraph 0042 ];

detecting, by each of the exchanges, occurrence of or release from trouble with a PVC connection through the corresponding controlling connection [ i.e. periodic monitor control PVC at each exchange unit for detection of a line failure ] [ A2, B2, Figure 13, Abstract; and paragraphs 0009 and 0041 ]; and

switching an operative PVC connection to another one of the PVC connections in response to a result of the detection [ i.e. switch the connection over to reserve connection in the event of a line failure ] [ A4, Figure 3; Abstract; and paragraphs 0008-0010 ].

7. As per claim 2, Yamada discloses wherein, if while one of the PVC connections is used as a currently used PVC connection, it is detected from the corresponding controlling connection that trouble has occurred with the currently used PVC connection, then each of the exchanges switches the operative PVC connection to another one of the PVC connections as a bypassing PVC connection [ i.e. at each exchange unit, switch over to reserve connection in event of line failure ] [ Abstract, paragraphs 0009 and 0011 ].

8. As per claim 4, Yamada discloses wherein the controlling connections are set by an operation administration and maintenance function [ paragraph 0006 ].

9. As per claim 5, Yamada discloses wherein each of the exchanges detects trouble through receipt of an alarm indication signal cell from the operation administration and maintenance function over one of the controlling connections [ paragraph 0005 ].

10. As per claim 7, it is rejected for similar reasons as stated above in claim 1. Furthermore, Yamada discloses set a master PVC connection [ i.e. set primary line connections ] and set a bypassing PVC connection [ i.e. set reserve line connections ] [ Figures 2 and 4; and paragraphs 0046 and 0048 ].

11. As per claim 9, Yamada discloses wherein a plurality of repeating exchanges are connected on a route of the bypassing PVC connection and a connection for forming the

Art Unit: 2154

bypassing PVC connection is set in each of the repeating exchanges [ i.e. plurality of exchange unit ] [ paragraph 0159 ].

12. As per claim 10, Yamada discloses wherein each of the first and second exchanges designates a connection set in advance and signals a cell to a neighboring one of the plurality of repeating exchanges through the designated connection [ i.e. the connections are set in advance in each exchange unit ] [ paragraphs 0119, 0142 and 0159 ].

13. As per claim 11, it is rejected for similar reasons as stated above in claim 1.

14. As per claim 12, it is rejected for similar reasons as stated above in claims 4-6.

15. As per claim 13, it is rejected for similar reasons as stated above in claim 2.

16. As per claims 15 and 16, it is rejected for similar reasons as stated above in claim 4 and 5.

17. As per claim 18, it is rejected for similar reasons as stated above in claim 7.

***Claim Rejections - 35 USC § 103***

Art Unit: 2154

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 3, 8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. [ US Patent Application No 2003/0137933 ], in view of Heeren et al. [ US Patent No 6,311,288 ].

20. As per claim 3, Yamada does not specifically disclose wherein, if, while the bypassing PVC connection is used, it is detected that the currently used PVC connection has been released through the corresponding controlling connection, then each of the exchanges switches the operative PVC connection to the currently used PVC connection. Heeren discloses wherein, if, while the bypassing PVC connection is used, it is detected that the currently used PVC connection has been released through the corresponding controlling connection, then each of the exchanges switches the operative PVC connection to the currently used PVC connection [ i.e. restore the communication from the alternate path to the primary path ] [ Abstract; and col 3, lines 50-57 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Yamada and Heeren because Heeren's teaching of restoring PVC connection would allow system to return to its original stage so that system resource such as backup PVC connection can be reused for other purposes.

21. As per claim 8, it is rejected for similar reasons as stated above in claim 3.

22. As per claims 14, it is rejected for similar reasons as stated above in claim 3.

23. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. [ US Patent Application No 2003/0137933 ], in view of Nagata et al. [ US Patent No 6,181,680 ].

24. As per claim 6, Yamada does not specifically disclose wherein each of the exchanges detects trouble through failure to receive a continuity check cell from the operation administration and maintenance function over one of the controlling connections. Nagata discloses wherein each of the exchanges detects trouble through failure to receive a continuity check cell from the operation administration and maintenance function over one of the controlling connections [ col 2, lines 7-31; and col 5, lines 30-38 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Yamada and Nagata because Nagata's teaching of continuity check cell would allow to monitor the performance of a connection to quickly locate failure of a communication path.

25. As per claim 17, it is rejected for similar reasons as stated above in claim 6.



Art Unit: 2154

26. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

27. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached at (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/038,655  
Art Unit: 2154

Page 9

Dustin Nguyen

Examiner

Art Unit 2154

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SUPERVISORY PATENT EXAMINER  
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